

Credential Transparency

Welcome! We'll begin in about 5 minutes.

- Please keep your microphone muted until Q/A begins.
 - *Do not mute your phone if your system plays music.*
- Online attendees are encouraged to send questions using the chat feature.
- We are recording the presentation today.

**Workforce Training and
Education Coordinating Board**





Speaker Panel

2



Dane Linn

Vice President, Immigration,
Workforce & Education
Business Roundtable



Brad Markell

Executive Director
*AFL-CIO Working for
America Institute*



Scott Cheney

Executive Director
Credential Engine



Eleni Papadakis

Executive Director
*Washington's Workforce Board
Board Chair
Credential Engine*

Marina Parr, Director of Communications, *Washington's Workforce Board*

Randy Smith, IT and Research Specialist, *Washington's Workforce Board*

Lew McMurrin, Future of Work Co-Manager, *Washington's Workforce Board*



Background on Credential Transparency Initiative



Dane Linn

Vice President, Immigration,
Workforce & Education

Business Roundtable



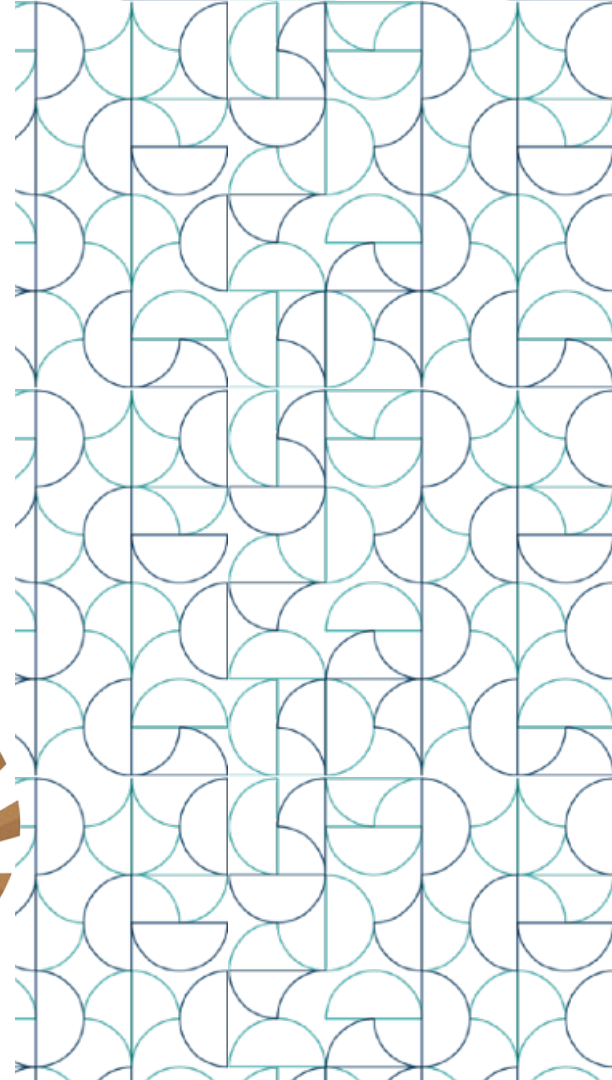
Overview of Credential Engine



Scott Cheney
Executive Director
Credential Engine

Credential Transparency and Literacy in the Marketplace

| July 22, 2019





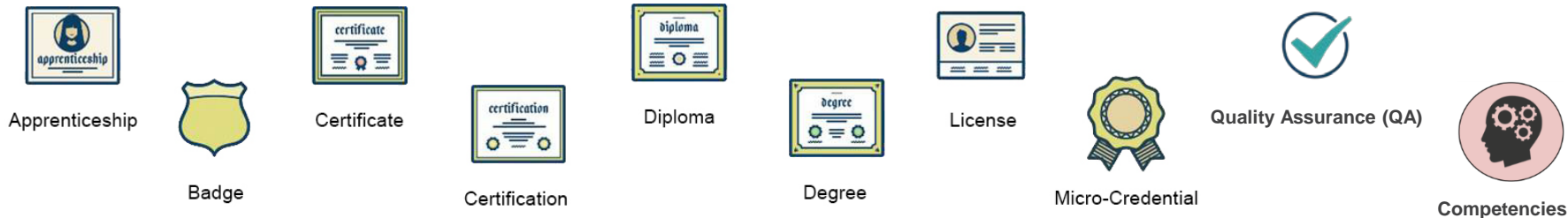
Our Mission and Work

- To bring transparency to all credentials—their content, competencies, assessments, quality indicators, pathways and outcomes.
- To reveal the marketplace of credentials.
- To increase credential literacy.
- To help everyone make more informed decisions about credentials and their value.





The Problem – Lack of Shared Understanding Across All Credentials



The Marketplace of Credentials Is Confusing and Complex:

- Many different types of credentials with variation in content, quality and value.
- The market is expanding - over 730,000 confirmed in the U.S. alone.
- Previously no common language to describe or compare credentials.
- Misalignment between industry needs and educational offerings.
- No mechanism for stacking credentials based on “competencies.”





Moving Credentials to Linked Data

Searching for Hotels v. Credentials

Google IT programs in dc

All Images Shopping Maps News More Settings Tools

About 201,000,000 results (0.70 seconds)

- Purdue University Global | Online IT Degrees**
go.purdueglobal.edu/InfoTech
Own Your Education. Explore Purdue Global's IT Programs Today. Apply! Classes Start 6/6.
- IT Programs | South College® Online**
apply.south.edu/IT/Programs
Accredited Online Education. Fill Out a Form to Get Started. Military Friendly. Hands-On Career Training. Night & Flexible Classes. Get Started Today! Services: Career Advisors, Modern Technology, Career Fairs.
Current & Former Military · Military Grant · Financial Aid · First Responder Grant
- DC Adult Training Programs Provide Career Certification, Job ...**
<https://osse.dc.gov/.../dc-adult-training-programs-provide-career-certification-job-plac...>
Sep 28, 2012 - WASHINGTON, DC – District of Columbia adult learners were awarded graduate certificates, trade certifications and immediate job placement ...
- IT certification programs Washington DC, Microsoft Cisco CompTIA ...**
<https://www.learn4good.com/.../washington-dc-computer-certification-programs.htm>
IT certification programs in Washington DC area: Computer training classes. ... Cisco CCNA & CompTIA A+ / Network+ certifications. ... Citivide Computer Training Center in Washington DC is a nonprofit corporation dedicated to helping underprivileged people acquire the skills they need to ...
- Computer Training & Certification Courses | Washington, D.C. ...**
<https://www.dcnewhorizons.com/training-certifications>
New Horizons Washington, D.C. is a premier training provider. And, with award-winning instructors and a no-cancellation policy, we are able to utilize the best ...
- Paid Training Jobs, Employment in Washington, DC | Indeed.com**
<https://www.indeed.com/q-Paid-Training-I-Washington,-DC-jobs.html>
5957 Paid Training jobs available in Washington, DC on Indeed.com. ... Education - Graduate of an

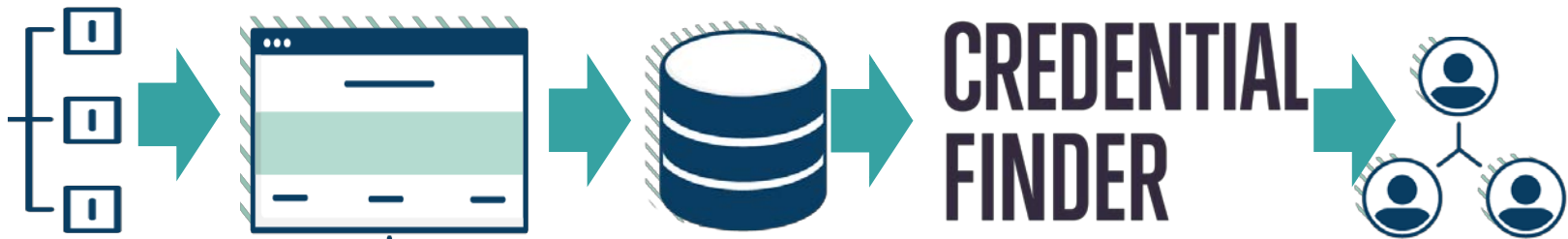
Why are the searches different?

- Travel industry uses linked data.
- Credentials haven't, and most still don't.
- information is not well-organized or comparable.
- With Credential Engine, we're moving the credential marketplace to use linked data, allowing credentials to be searched, discovered and compared just like cars, flights, or commercial goods.
- To get there, we need a common language.
- CTDL is going through the process of gaining recognition to become the official schema for credentials.





How We do it: Transparency Through Technology



Credential Transparency Description Language (CTDL) & CTDL-ASN-

Common languages that describes key features of credentials, credentialing organizations, competencies, and quality assurance bodies.

Common descriptors will allow for better apples-to-apples comparison between credentials.

Publishing – After creating a user account, organizations use the API, Credential Registry Publisher, bulk upload, or—in the future—harvest structured data to convert organization, credential, and quality assurance information to the common language and publish to the Registry

Organizations have a suite of options to add information to the Registry.

Credential Registry – More than a database, the Registry collects and connects credential data described by the CTDL and supports and open applications marketplace.

Developers can create specialized applications to utilize Registry data for different types of audiences, such as employers, veterans, and students.

CREDENTIAL FINDER

Credential Finder Beta Application – This serves as a basic search app to view the information stored in the Registry.

The public can use the Finder to see all information published to the Registry.

Community – A wide range of stakeholders receive technical assistance and other services to help them both publish to the Registry and consume the data it houses.

Credentialing bodies, developers, and other users have access to resources such as guides, best practices, and direct staff support.

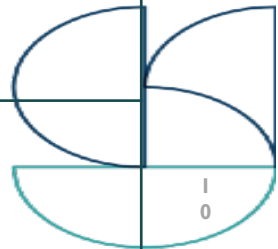
Open Applications Marketplace





A Common Language Captures & Structures Credential Data

<p><u>CREDENTIAL</u></p> <ul style="list-style-type: none">• Type• Description• Competencies• Owned/Offered By• External Quality Assurance• Renewal/Revocation• Connected Credentials• Jurisdiction• Pathways	<p><u>ORGANIZATION</u></p> <ul style="list-style-type: none">• Name / Parent Organization• Type• Description• External Quality Assurance	<p><u>COST</u></p> <ul style="list-style-type: none">• Price• Cost Types• Payment Information• Residency
<p><u>ASSESSMENT</u></p> <ul style="list-style-type: none">• Name• Competencies• Assessment Type• Delivery Type• Requirements, Duration, and Location	<p><u>LEARNING OPPORTUNITY</u></p> <ul style="list-style-type: none">• Types• Competencies• Delivery• Requirements, Duration, and Location	<p><u>IN DEVELOPMENT</u></p> <ul style="list-style-type: none">• Employment & Earnings• Aggregate Credential Holder Profiles<ul style="list-style-type: none">○ <i>Such as pass-rates</i>• Military-specific descriptors• Employer Requirements, Preferences, or Recognition
<p><i>*For CTDL's full vocabulary of 400+ terms, visit www.credreg.net</i></p>		





Data Interoperability

No single standard does it all.

Technical Stack

breadth

**CTDL & CTDL-
ASN**

Data Dictionary & Vocabulary

element & expected value definitions

Data Model

different models for different uses

Protocol

e.g. REST

Serialization

e.g. specific JSON or XML binding

API

*e.g. specific API calls specified as part
of an education data standard*

depth

Broader Applicability

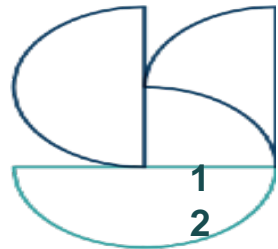
Depth of Systems
Integration





Example Benefits of Linked Open Data (LOD)

- Breaking down information silos.
- Linking disparate systems to authoritative sources.
- Enabling useful applications.
 - Linked Open Data is essential for modern apps and services on the semantic web, such as
 - *Expedia, Travelocity, Mapquest, Car.com, etc....*





<https://goo.gl/56oheh>

Associate of Applied Science Degree (AAS): Industrial Maintenance Technologies - Advanced Manufacturing Technician Track

Compare

Gateway Community & Technical College
Associate's Degree

Basic Info

Connect to this Credential

About this Credential

The Advanced Manufacturing Technician Program (AMT) is a two-year (five semesters) Associate Degree that combines cutting-edge curriculum, paid working experience along with learning highly sought-after business principles and best practices of world-class manufacturers. It is more than a job, it is a pathway to a career.

AMT is more than just sitting in the classroom. The college and the manufacturer work closely together to enhance student learning. In addition to gaining skill mastery in the educational portion of the program, students learn about the culture of manufacturing through manufacturing workshops such as safety culture, lean manufacturing, problem solving, etc. Opportunities to increase communication and presentation skills as well as develop work ethic are also available. Students earn a wage while attending college and gain priceless work experience with global and local manufacturers.

Students who participate in the AMT program will have their tuition and fees paid for by their sponsoring company. Participating manufacturers have their own compensation package and rate of pay, raises, and benefits offered are based on the policies of the individual manufacturer.

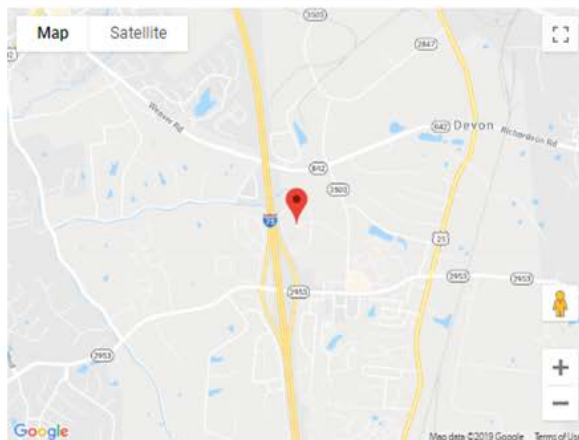
Students needing assistance with costs outside of tuition may be eligible for grants and financial aid. Students needing assistance are encouraged to apply early and must start the process by completing an application on the fafsa.gov website.

Estimated Time to Earn

Estimated: 2 years

Estimated Time to Complete Required Learning Opportunities

Location Info



500 Technology Way, Florence, Kentucky 41042, United States

Jurisdiction

This credential can be used in:
• United States

Owned By

Gateway Community & Technical College

Gateway Community and Technical College is Northern Kentucky's only

More Info

Competencies

24 Teaches 24 Competencies

Connections

4 Included Credentials

Quality Assurance

1 Quality Assurance

1 Owner's Quality Assurance

Requirements and Recommendations

1 Requires 1 Learning Opportunity

Estimated Costs

1 Learning Opportunity Cost

0 Credentials

0 Organizations

0 Assessments

0 Learning Opportunities

Expand/Hide Details

Compare Selected



Certificate in Supply Chain Management/Logistics

Compare

Ivy Tech Community College of Indiana
Certificate

Basic Info

Connect to this Credential

About this Credential

Ivy Tech's Supply Chain Management program prepares students to enter the workforce with the skills demanded in industry. It addresses the movement and storage of raw materials, work-in-process inventory, analysis and finished goods. Students are able to study and get familiar with the high technologies and information systems used to track goods and increase efficiencies.



Students will receive short-term certificates that are designed for workforce preparation. They provide access to target training that will be on specific certification exams. Courses in the program also apply toward technical certificates and degree programs.

As part of Governor Holcomb's Next Level Jobs initiative, the Workforce Ready Grant program provides free training for working-age Hoosiers in the state's highest demand jobs. These industries have higher median salaried jobs and are rapidly growing in Indiana - including Advanced Manufacturing, Building & Construction, Health & Life Sciences, Information Technology & Business Services, and Transportation & Logistics. For more information, please refer to <https://www.nextleveljobs.org/Job-Seeker/Available-Job-Training>

Credential Status Type

Active

Credential Type

Certificate

Learning Delivery Type

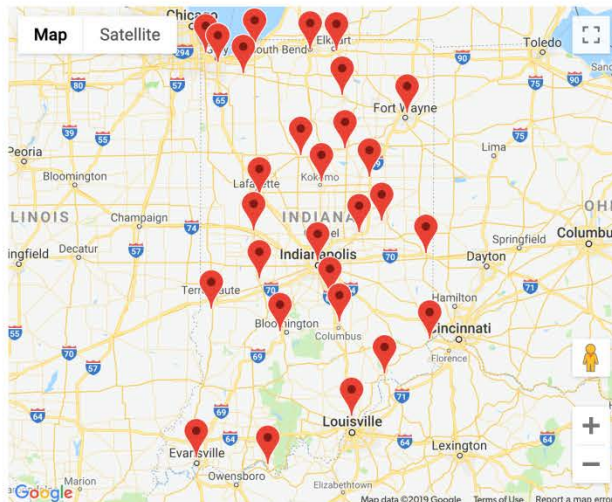
In-Person

Online Only

Subjects

Retail_Hospitality_Sector

Location Info



- 815 E. 60th Street, Anderson, Indiana 46013, United States
- 200 Daniels Way, Bloomington, Indiana 47404, United States
- 4475 Central Avenue, Columbus, Indiana 47203-1868, United States
- 410 E. Columbus Dr., East Chicago, Indiana 46312, United States
- 3501 N. First Avenue, Evansville, Indiana 47710, United States

More Info

Competencies

18 Teaches 18 Competencies

Connections

1 Has 1 Common Condition

Quality Assurance

1 Quality Assurance

3 Owner's Quality Assurance

Requirements and Recommendations

2 Requires 2 Credentials

1 Requires 1 Learning Opportunity

Estimated Costs

1 Cost

Auxiliary Equipment Technician

Auxiliary Equipment Technician

Job

About this Job

Description

Auxiliary Equipment Technicians perform organizational and intermediate maintenance as well as advanced systems operations of hydraulic power plants and hydraulic system components, emergency diesel engines, compressed gas systems (air, oxygen, hydrogen, and nitrogen), sanitation systems, seawater systems, freshwater systems, oxygen-generating equipment, atmosphere control equipment, and submarine salvage equipment (watertight hatches and doors) and supervise operations and maintenance performed by Auxiliary Equipment Operators.

Identifiers

Job Code:	001519
CTID:	ce-cdf5a0f3-bb47-4bf7-8bba-b0c74011b575
Short Title (30 characters):	AUXILIARY EQUIPMENT TECHNICIAN
Short Title (14 characters):	AUX EQUIP TECH
Pay Plan Type:	Enlisted
Rating Code:	MMA

Rating Info

Rating:	Machinist's Mate, Non-Nuclear, Submarine Auxiliary
Rating Code:	MMA
Rating Version:	2
Rating Upload Date:	6/16/2017 12:28 PM
Rating Publication Date:	OCT 2015

Framework Connections

DoD Group:	Shipboard Propulsion
DoD Code:	165000
SOC Title:	Maintenance and Repair Workers, General
SOC Family:	Installation, Maintenance, and Repair
SOC Code:	49-9071.00

Related Organizations

Job Origin and Management

US Navy	Logo
Descriptive text for this organization	
Creator	Copyright Holder

Sub-Organization/Department Name	Logo
Descriptive text for this organization	
Management	

Related Information

Job Connections

2 Other Jobs in this Rating
19 Related NEC Codes
4 Billet Positions

Education and Training

11 Related Credentials
2 Related Assessments
1 Related Learning Opportunities
142 Training Tasks
11 Performance Objectives

Related Systems and Components

2 Related Systems

Related Tasks

110 Occupational Tasks
142 Maintenance Tasks

Raw Data

JSON Data





Retail & Hospitality Credentials Initiative

National Retail & Hospitality Initiative Initiative:

- Identify, collect, and publish retail, restaurant, and hospitality credentials—from badges to degrees and everything in between—to the Credential Registry.
- Engage certification bodies, industry associations, community colleges, unions, apprenticeship programs, employers, and more in publishing credentials.

RHCI Working Group Priorities:

- Contribute to the credential inventory (180+ initial credentials identified) and outreach to credential issuers.
- Recommend applications and tools that ensure the data gets into the hands of employers, workers, students, and more.
- Participate in breakout groups tackling different topics (e.g. career pathways, employers, credential quality).
- Recommend next steps or “phase two” of the project.

RHCI Working Group Members





Who Benefits from the Credential Registry Data?



Credentialing Organizations can

- Differentiate their programs to help them stand out in the vast credential marketplace, as well allow both students and employers to better understand their credentials and how they connect to education and career pathways.



- Students, workers, guidance counselors, and veterans can access comprehensive and comparable data which empowers them to make informed education and career pathway decisions.



Employers and HR systems can

- Integrate Registry data to help find, signal, and understand the credentials that have value to their business needs, and add context to the hiring process.



Policymakers can

- Make better decisions about how to address economic, workforce, and education challenges, as well as break down data silos.





A State Roadmap to Credential Transparency

Make the Case *(that this is about improving labor market outcomes for everyone!)*

1. Communicate clear use cases to benefit students, workers, employers, educators, programs, and key policy goals.
2. Identify what data about credentials is necessary to be transparent and publicly available.

Align with Existing Education and Workforce Data Commitments

3. Ensure that this roadmap is integrated with, complements, and extends on-going P-20-W data efforts underway in the state to ensure continuity and effectiveness.

Catalog and Publish the Credentials Offered and Sought in Your State

4. Inventory all credentials in the state.
5. Publish all credentials and their competencies to the Credential Registry and the open web in CTDL and CTDL-ASN.

Turn these Data into Actionable Information

6. Link and align credential data with other essential data in the state.
7. Support the creation of end user tools, services and systems with robust navigation and guidance capabilities.
8. Ensure sustainability of credential transparency through legislative, agency and institution policies that continuously improve credential transparency for the benefit of its citizens and markets.
9. Establish the necessary infrastructure for enduring data transparency.





State Policy Options

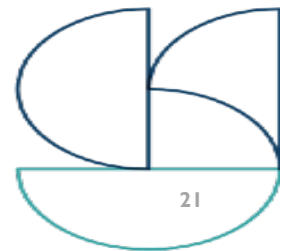
- Identify a state lead to oversee credential transparency work
- Assist major education and training providers, systems and coordinating boards with publishing rich credential & competency information
 - Have the same adopt official positions toward this goal
- Integrate use of these data into state tools to identify credentials of quality that are eligible for certain uses
- Consider legislative language that promotes and rewards transparency





A Few Notes...

- Public Service Non-Profit.
- No Fees to Publish Data.
- No Fees for Non-Commercial Use.
- Our language is an open, Creative Commons Licensed schema.
- Our role is NOT to define quality, but to provide appropriate ways to have quality described and determined by appropriate entities (i.e. accreditors, state agencies, etc.).
- We do not collect or track individuals or their data.





For more information

Scott Cheney Executive Director
scheney@credentialengine.org

Emilie Rafal Director of Programs
erafal@credentialengine.org

Jen Briones Project Manager
jbriones@credentialengine.org

: info@credentialengine.org

: credentialengine.org

Technical Information: www.credreg.net/

Credential Finder Search App Prototype:
<http://credentialfinder.org>





Credential Transparency from the Business Perspective



Dane Linn

Vice President, Immigration,
Workforce & Education

Business Roundtable



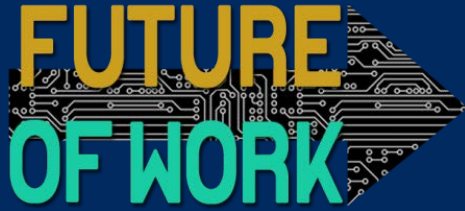
Credential Transparency from the Workers' Perspective



Brad Markell

Executive Director

*AFL-CIO Working for America
Institute*



Credential Transparency

Q&A Session

Workforce Training and
Education Coordinating Board



Building Credential Transparency with Credential Engine partnership

Marina Parr, Workforce Board
Communications Director

Randy Smith, Workforce Board
IT and Research Specialist

**Workforce Training and
Education Coordinating Board**





The screenshot shows the Washington Career Bridge website. At the top left, there is a logo with a map of Washington and the text "Washington Career Bridge". Below the logo, it says "Find the education & training you need to get the job you want". On the top right, there is a "SIGN IN / REGISTER" link. The main content area is titled "Find education and plan your career in Washington". On the left side, there is a vertical menu with the following items: "EXPLORE CAREERS", "VIEW JOB TRENDS", "FIND EDUCATION", "PAY FOR SCHOOL", "ELIGIBLE TRAINING PROVIDER LIST", and "FOR BUSINESS". Below the menu is a small image of a printed guide titled "Where are YOU going?" and the text "Printed guide available". The main content area features three cards: "Explore Careers" with a purple icon and a "TAKE A QUIZ" button, "View Job Trends" with a blue icon and a "FIND OUT MORE" button, and "Explore Education" with an orange icon and a "START YOUR SEARCH" button.

CareerBridge.wa.gov is a state website that connects to over 6,500 Washington education programs in one place.



Washington Career Bridge

Find the education & training you need to get the job you want

[Sign in / Register](#)

Back
Find Education
Education Search
Education Details

Explore Careers

View Job Trends

Find Education

Pay for School

Eligible Training Provider List

Education Details

Information Security
Award type: Certificate of Completion
Edmonds Community College

Program Details

School Details

Performance Results

Student Characteristics

Consumer Report Card

This program is grouped with other closely related programs at Edmonds Community College. [i](#)

Employment, wages and completion for all programs related to Information Security at Edmonds Community College [i](#)

Program Type: Computer and Information Systems Security/Information Assurance

Completion Rate i	77%
Employment Rate i	87%
Typical (Median) Hourly Earnings	\$26.13
Typical (Median) Annual Earnings	\$60,028.00

[View statewide earnings and employment trends for jobs related to programs of this type.](#)

Industry of employment for all programs related to Information Security at Edmonds Community College [i](#)

Program Type: Computer and Information Systems Security/Information Assurance

Industry	Percent of all students who completed the program(s) and are employed
Professional, Scientific, Technical Services	21%
Education	18%
Administrative Support	11%
Manufacturing	10%

[Back to Search Results](#)

[Print](#)



Sign in / Register

Back Find Education Education Search Education Details

Explore Careers
View Job Trends
Find Education
Pay for School
Eligible Training Provider List

Program Details
School Details
Performance Results
Student Characteristics

Education Details

Information Security
Award type: Certificate of Completion
Edmonds Community College

[Back to Search Results](#)

[Print](#)

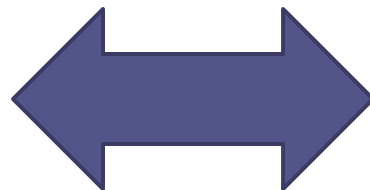
Student Characteristics

This program is grouped with other closely related programs at Edmonds Community College.

Student Characteristics for all programs related to Information Security at Edmonds Community College

Program Type: Computer and Information Systems Security/Information Assurance

Enrollment	
Number of students completing the program	154
Completion Rate	77%
Average number of students who completed each year	51
Gender	Percent
Male	77%
Female	23%
Race	Percent
American Indian or Alaska Native	1%
Asian or Pacific Islander	8%
Black/African American	9%
Hispanic	7%
White	71%
Multi-racial	4%
Age	Percent
Under 20	0%
20 to 29	22%
30 to 39	30%



Credential
Engine™



- Career Bridge data model:
School-Location-Program-Occupation
- Credential Transparency Description Language (CTDL)
- Credential Registry allows Third-Party Publishers
- Workforce Board will continue to evaluate performance



Workforce Board partners with Credential Engine to:

- Develop technology to upload thousands of WA education programs from Career Bridge to Credential Engine.
- Help employers make better hiring decisions based on actual skills/competencies.
- Help schools understand value of marketing their programs to national audience.
- Build a sustainable project that encourages continued participation from schools.



Potential policies to explore

- How to transition current credentialing system into a common language that highlights skills and abilities?
- How to ensure what we're credentialing is what the employer is looking for?
- How to track the value of *all* credentials to employers and participants through performance analysis?
- Occupational data needs to be collected from WA businesses to more accurately show connection between training and employment.



- Stakeholder engagement
- Ongoing research
- Policy formation
- Three Task Force meetings remaining
- Final recommendations due
December 1, 2019

Upcoming 2019 Task Force Meetings

August 8th, Spokane

October 10th, SeaTac

November 7th, Olympia

Thank you!

Learn more at www.wtb.wa.gov

Joe Wilcox

joe.wilcox@wtb.wa.gov

360-709-4631

Lewis McMurrin

lewis.mcmurrin@wtb.wa.gov

360-709-4628

**Workforce Training and
Education Coordinating Board**

